## **ABSTRACT**

The invention relates to an arrangement for optimizing the data transmission over a bidirectional radio channel. According to the invention, the digital data to be transmitted according to a data transmission protocol is divided into individual data packets in each of two transmitting/receiving stations. In each transmitting/receiving station, the number and/or priority and/or type (e.g. information, control characters, repeat blocks) of the data packets generated by the data transmission protocol of the higher level and transmitted to the respective transmitter of the station is determined (data packet identifications). According to the data packet identifications, the data transmission protocol is then selected in at least one of the stations in accordance with an optimum utilization of the radio channel capacity.